Department of the Army
Headquarters, United States Army
Training and Doctrine Command
Fort Monroe, Virginia 23651-5000

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Information Management: Automation

REQUIREMENTS DOCUMENTATION FOR INFORMATION SYSTEMS FOR TRADOC ORGANIZATIONS AND INSTALLATIONS

Summary. This pamphlet provides procedures for acquiring information technology (IT) for U.S. Army Training and Doctrine Command (TRADOC) organizations and installations. It is a consolidated source of information that includes aspects of requirements management, resourcing, and contracting.

Applicability. This pamphlet applies to all elements of TRADOC, including TRADOC tenants on non-TRADOC installations. With exception of the requirement to coordinate all information system equipment and services acquisitions with their local Directorate of Information Management (DOIM) for supportability, non-TRADOC tenants on TRADOC installations are subject to policies and procedures established by their parent major Army command (MACOM).

Suggested Improvements. The proponent of this pamphlet is the Deputy Chief of Staff for Information Management (DCSIM). Send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) through channels to Commander, TRADOC, ATTN: ATIM-I, 90 Ingalls Road, Fort Monroe, VA 23651-1065. Suggested improvements may also be submitted using DA Form 1045 (Army Ideas for Excellence Program (AIEP) Proposal). Electronic mail address: atimi@monroe.army.mil.

Availability. This publication is available solely on the TRADOC Homepage at http://www-tradoc.army.mil.

Contents

*This pamphlet supersedes TRADOC Pam 25-72 dated 1 October 1997.

Chapter 1
Introduction

1-1. Purpose. This pamphlet provides information on documenting and processing operational requirements and acquisition packages for information technology (IT). While emphasizing procedures that are unique to IT, this pamphlet also provides general information about processes for requirements management and acquisition to provide a context for the IT procedures.

1-2. References. Appendix A contains the required and related publications.

1-3. Explanation of abbreviations and terms. The glossary contains abbreviations and special terms used in this pamphlet.

1-4. Overview. This pamphlet covers documenting requirements and acquiring IT, to include information systems (IS), IS equipment or information services, from the origin of the requirement to contracting.

a. Chapter 2 provides procedures for requirements management. It includes documentation of information architectures and specific IT requirements. It explains the format, tailored for IT, and procedures for preparing an Operational Requirements Document (ORD).

b. Chapter 3 provides procedures for approving IT requirements greater than $200K in total program costs. It gives formats for briefing the HQ TRADOC Information Management Support Council (IMSC), and provides guidance for making Operation Maintenance, Army (OMA)/Other Procurement, Army (OPA) decisions and securing resources for executing approved requirements.

c. Chapter 4 provides procedures and formats for DOIM authentication of acquisitions. It also provides guidance on preparing a Statement of Work (SOW) and Purchase Request and Commitment for IT, and contacting vendors.

d. Chapter 5 provides guidance for acquiring visual information (VI) equipment.

e. Chapter 6 provides information about contract offloads and use of government credit cards to acquire IT.

Chapter 2
Requirements Management

2-1. Process. Requirements management is the process of identifying, integrating and documenting specific operational requirements for executing an organization's mission. It has both long-term (architecture definition) and short-term (requirement definition) components.

2-2. Architectures. Architectures provide a general framework for analyzing specific IS requirements. Department of Defense (DoD) and the Army use three types: operational architecture (OA), systems architecture (SA), and technical architecture (TA). Each can be developed for various organizational spans and geographic areas and focused on a different period of time in the evolution of an IT environment. Projects to acquire and implement IS equipment or information services are normally changes or additions to one of the baseline architectures. Based on priorities and anticipated resource constraints, the projects are integrated into logical groups to form time-phased target architectures. The target architectures are snapshots of what the architecture is planned to look like at designated milestones. The architecture envisioned to meet all operational requirements is the objective architecture. The progression of target architectures from baseline to objective is often referred to as the migration path.

a. Installation level architectures.

(1) Installation operational architecture. Lower echelon OA decompose (i.e., provide further details about) functions initially described at higher echelons. Most OA products for TRADOC missions can be developed by HQ TRADOC staff proponents. HQ TRADOC does not require installation-level OA products. In specific cases, staff proponents may require installation participation in developing OA products to help amplify local requirements. Per AR 25-1, proponents and installations will use the Army Enterprise Architectural Guidance Document (AEAGD) as guidance for developing OA products.

(2) Installation systems architecture. Installations will maintain a baseline and objective SA, and, as required for planning IT migration, target SA. Use the Information System Architecture Plan (ISAP) format for documenting network components. Use TRADOC Pam 25-73 and the AEAGD as general guidance for documenting other aspects of the IT architecture.

(3) Installation technical architecture. All TRADOC installations will implement IT within the constraints imposed by the Joint Technical Architecture-Army (JTA-A), and further extensions promulgated by TRADOC for command-wide use in TRADOC Pam 25-73. Installations can further define standards options in their installation TA. This hierarchical set of TA is consulted and enforced when defining requirements for, and acquiring, specific IS components. The intent is to standardize on "standards," not on systems. That is, TRADOC will accept various vendors' systems as part of the architecture as long as they conform to the mandated open standards, rather than demanding the use of a particular vendor's products to ensure interoperability. If the JTA-A, TRADOC Pam 25-73, and industry standards are insufficient to enable heterogeneous systems to interface as required by the installations' missions, then selection of preferred and supported products may become necessary. Since DOIM cannot provide maintenance and training support for all vendor products, garrison commanders are permitted to restrict DOIM support to preferred products.

b. Command architecture.

(1) Command operational architecture. The Army's approach to OA is a hierarchical decomposition of functions. TRADOC will follow a top-down strategy in OA development. Consistent with the AEAGD formats,

HQ TRADOC functional proponents will provide contextual OA products, as required, to define and justify specific IT requirements. DCSIM will lead integration into a command-wide OA. The OA will be an integration tool for HQ TRADOC in the requirements management process.

(2) Command system architecture. HQ TRADOC will develop and maintain system architecture for IT used command-wide. TRADOC DCSIM maintains MACOM-level SA in TRADOC Pam 25-73.

(3) Command technical architecture. TRADOC, like all Army activities, will implement IT within the standards selected for the JTA-A. TRADOC will define TRADOC-specific refinements or extensions to the JTA-A that apply command-wide. These could take several forms:

- They may specify the TRADOC approach for implementing options within JTA-A standards.
- They may be additional standards for required capabilities not covered by the JTA-A.
- They may be a list of preferred products, which while not mandatory, are supported by TRADOC in some fashion that other products are not.

These refinements and extensions will be published annually in TRADOC Pam 25-73.

2-3. Requirements.

a. Business Process Reengineering (BPR). Requirements for IT generally originate with the users' or functional proponents' vision of how their mission execution can be improved through IT insertion. For some common user requirements (e.g., networks) the DOIM may act as the user. Clear definition of the operational requirements, not just the technical or system requirements, is essential for effective IT justification. The intent of BPR analysis is to optimize the functional procedures, organization and training in conjunction with the IT solution. IT system proponents will conduct BPR prior to requesting approval for projects that require HQ TRADOC level approval.

b. Documentation of operational requirements. Documentation requirements depend on the level of approval required (see para 3-1).

(1) Requirements approved at installation level: the installation will determine their own documentation formats and coordination procedures. TRADOC Form 25-73-1-R, Information Technology Requirement (ITR), is available for optional use. Coordination procedures must ensure DOIM authenticates requirements in accordance with (IAW) chapter 4.

(2) Requirements approved by HQ TRADOC IMSC or DCSIM: the user organization will submit an ORD, tailored IAW Figure 2-1. ORD can be generated and processed at any time. ORD can be submitted for funded or unfunded requirements, (e.g., requirement approval can be sought as a precursor to programming out-year execution). ORD approval by HQ TRADOC must precede any IT development or acquisition.

(3) Requirements that must be approved by HQ TRADOC DCSCD, refer to TRADOC Pam 71-9, Chapter 11, for documentation and coordination procedures.

(4) AR 25-1 exempts networks (para 6.3p(1) and 6.3r(1)) and E-mail systems (para 6.3q(1) from documented justifications, but not from authentications of architectural compliance. For these exemptions, approval of the unfinanced requirement (UFR) documentation by the HQ TRADOC DCSIM or IMSC in the year of execution is adequate approval for project execution. If no UFR was approved in the year of execution, follow the procedures for an ORD, but omit the justification portions, i.e., paragraphs 1, 2, and 3.

d. Technical requirements. Although it is the operational requirements that drive and justify modernization, the definition of IT requirements must eventually include technical aspects. Users, information management officers, and DOIM all participate in expanding the operational requirement into the full ORD format. This need not be a sequential coordination of drafts or documents among various organizations. If appropriate, use the approach of an integrated concept team to define the requirement. Include representatives from the user, technical, and acquisition communities. The user organization must coordinate all requirements that involve IT, IS equipment or information services with the installation DOIM prior to submitting to HQ TRADOC. DOIM will consider the technical alternatives, e.g., using existing capabilities, combining requirements into common-user technical solutions, or pursuing a separate solution. DOIM will ensure the requirement, to the extent its solution can be defined, is consistent with higher-level and installation-level systems and technical architecture (TA). DOIM will update their target and objective SA to reflect locally-approved requirements and requirements submitted to HQ TRADOC for approval. DOIM will advise users about IT marketplace trends that influence the requirement definition. DOIM will determine whether the installation infrastructure (networking, processing platforms, support applications) can support the functional requirements as stated. If not, DOIM will determine the associated requirements to modernize the infrastructure. These can be added to the specific requirements package under consideration or can be the start of a new requirements package for common user infrastructure assets. DOIM and user organizations must jointly analyze the probable load placed on the infrastructure, the existing capabilities, and possible solutions. Coordination will involve such parameters as geographic locations to be linked, type and volume of data to be transmitted and received, peak volumes of data, gateways and interfaces, system use times, time boundaries for transmission, reception and response; and quantity, type and placement of processors, peripherals and communications interface devices.

1. General Description of Operational Capability.

a. Summarize the overall mission area. Provide a general description of any analyses conducted to determine how the business process will be changed, e.g., a business process reengineering study or a "to-be" operational architecture.

b. Identify the alternative solutions considered to satisfy the operational requirements. If the preferred solution has already been identified, explain the rationale for its selection. Rationale should include the comparative operational benefits, cost savings or avoidances, return on investment and risks.

2. Threat. Explain the level of security required. If applicable, summarize the threat to be countered and/or the threat environment.

3. Shortcomings of Existing Systems. Describe why existing systems cannot meet current or projected requirements. Include resource considerations, as applicable.

4. Capabilities Required. All ORD must provide the information described in paragraph 4a. If the IT solution has not been determined and the approval decision sought is authority to develop the concept (equivalent to Milestone 0), only paragraph 4a needs to be included. If the preferred solution has been identified, and the decision sought is approval to acquire the solution (equivalent to compressed Milestone 0/IV), include paragraph 4b also.

a. Identify the required operational performance parameters (capabilities and characteristics). Describe requirements in operational, output-oriented, and measurable terms. Specify each performance parameter in terms of a minimum acceptable value required to satisfy the mission need. Identify operational constraints and any special certifications. Describe unique user interface capabilities.

b. List the major IT components required and their estimated costs. For distributed processing systems, provide a system architecture, showing, at a minimum, the system-to-system interfaces and the proposed communications means. Within the processing nodes, show how proposed components of the solution, e.g., servers, security guards, local area network (LAN), and software packages, will be distributed.

5. Program Support. Describe how the system will be integrated into the installation architecture and support services that are forecast to exist at the time the system will be fielded. Address consistency with the command-wide IM plans and architecture as documented in TRADOC Pam 25-73. Include:

a. Requirements for computer network support, such as geographic locations to be linked, required system use times, type and volume of data to be transmitted and received, time boundaries for transmission, reception and response, and peak volumes of data. Identify computer resource constraints (e.g., language, database, and computer architecture).

b. Requirements to exchange data with other systems, and standardization and interoperability requirements.

c. Maintenance requirements.

d. Human systems integration to include: broad manpower constraints for operators, maintainers, and support personnel; manpower factors that impact system design; and the training concept, to include training devices.

6. Force Structure. Estimate the number of systems needed, including spares and training assets. Identify organizations or sites that will employ the systems or subsystems.

7. Schedule Considerations. Define how the solution can be phased. If availability in a specific time frame is important, specify an objective for initial operational capability. Describe the impact if this objective is not achieved and identify a window of acceptability if appropriate.

Figure 2-1. Tailoring guidance for ORD

Chapter 3
IT Approval and Funding Procedures

3-1. Approvals.

a. Approval levels. Installations are authorized to approve their unique requirements up to $200K in total program costs using locally-determined procedures. See TRADOC Reg 25-73, paragraph 2-3, for guidance on applying this cost threshold. HQ TRADOC will approve requirements that meet any of the following criteria:

- the solution to the documented requirement is expected to exceed $200K in total program costs
- the requirement includes fielding the solution to multiple installations or activities
- the requirement is originated by one organization (e.g., a HQ TRADOC staff element) but is for use by another organization at a separate site.

Per TRADOC Pam 71-9, the DCSIM and HQ TRADOC IMSC are not authorized to approve requirements over $10M in total program costs. However, projects that exceed $10M must go to the HQ TRADOC IMSC prior to submission to TRADOC DCSCD for approval. IMSC or DCSIM will either disapprove the ORD, or recommend its submission for approval to TRADOC DCSCD.

b. Submitting IT approval requests. These procedures apply to IT projects that require HQ TRADOC approval. Organizations planning IT acquisition or modifications will submit an approval package to HQ TRADOC DCSIM, ATTN: ATIM-I. To facilitate electronic staffing, submit electronically (atimi@monroe.army.mil) using the standard file formats specified in the JTA-A for electronic document transmission. Coordinate the approval package with the appropriate HQ TRADOC functional proponent and the installation DOIM prior to submitting to TRADOC DCSIM. An approval package will contain the following:

(1) Executive summary stating what action or decision is sought from DCSIM or the IMSC. Typical decisions sought are approval explore concepts (Milestone 0), or approval to execute the recommended program (compressed Milestone 0/IV decision). Provide previous coordination, funding status, and an abbreviated description of the operational requirement (not to exceed one page), recommended acquisition or modification, and cost benefit.

(2) An ORD, written or updated to support the milestone decision sought. Requirements approved only for Milestone 0 must be subsequently approved for Milestone IV prior to acquisition actions.

(3) Economic analysis (EA) for acquisitions or modifications over $2.5M (total program cost).

c. After receipt of the approval package, DCSIM will determine how to proceed IAW the HQ TRADOC IMSC charter.

(1) DCSIM will review and approve life cycle replacements and requirements that do not impact or have potential utility for more than one functional area, unless the submitting organization specifically requests HQ TRADOC IMSC review.

(2) If the package requires HQ TRADOC IMSC approval, DCSIM may electronically staff an abbreviated package consisting of the executive summary and the DCSIM's assessment with the members of the IMSC for their review and vote. Otherwise, DCSIM will schedule a formal meeting of the IMSC members.

(3) In considering projects for approval, IMSC and DCSIM will review compatibility with other planned solutions in the command, the combination of several requirements into a command-wide capability, and compatibility with higher level and command-wide architectures, specifically TRADOC Pam 25-73. DCSIM will recommend any associated command-wide infrastructure requirements. Staff functional proponents will consider consistency with the command-level vision for their functional area.

Members of the HQ TRADOC IMSC include:

- HQ TRADOC DCSIM* (Chairperson)
- Assistant Chief of Staff*
- Assistant DCSCD*
- Assistant Deputy Chief of Staff for Base Operations Support (DCSBOS)*
- Assistant Deputy Chief of Staff for Training*
- Assistant Deputy Chief of Staff for Resource Management*
- Assistant Deputy Chief of Staff for Simulations and Analysis*
- Assistant Deputy Chief of Staff for Doctrine*
- Assistant Deputy Chief of Staff for Intelligence*
- Assistant Deputy Chief of Staff for Education*
- Fort Monroe DOIM
- Office of Internal Review and Audit Compliance
- Cadet Command Chief of Staff
- Staff Judge Advocate

(Voting members are identified by an asterisk (*))

(4) In some cases, the organization that submits the package will need to brief the HQ TRADOC IMSC. When a project is briefed, the briefing will follow the outline in figure 3-1. HQ TRADOC DCSIM will advise the requesting organization and schedule the briefing. Organizations that want to initiate presentations to the IMSC will provide agenda items to DCSIM. DCSIM will schedule the presentation.

1. Results sought from IMSC.

2. Operational requirements as described in the ORD, to include:

   a. Function(s) being automated or otherwise supported by the IS.

   b. Organizations and locations where the system is being deployed.

   c. Interoperability requirements.

   d. Information exchange and connectivity requirements.

   e. Training requirements.

3. Analysis of alternatives, including the results of the EA (as required). Identify the expected life of the system and the system that will be replaced by this project, if applicable.

4. Benefits. Explain all benefits and cost savings to the organization, TRADOC, and the Army, resulting from the acquisition of the system. Include intangible benefits and/or cost avoidance. Sunk costs should be explained and benefits should be quantified when possible. Benefits that cannot be assigned a dollar value (i.e., productivity gains) can sometimes be quantified in other terms. It is important that all significant benefits be included whether quantifiable or non-quantifiable. Benefits must be presented so the decision-maker can recognize the desirable returns of acquiring the proposed system.

5. Acquisition strategy. Work closely with the contracting office to develop strategy. Outline how the system will be or is being acquired. Include identification of supporting acquisition agency or office. Address such areas as competition, preliminary solicitation, contractual vehicle, and prototyping.

6. Impact on the installation(s)' system architecture. Explain the integration of the proposed solution with the available infrastructure and any modernization required for full operational capability. Address consistency with the command-wide IM plans and architecture as documented in TRADOC Pam 25-73.

7. Schedule. Identify when the next milestone/phase should be reached. Provide dates of previous phases/milestones. Also, provide projected schedule for the life cycle management reviews.

8. Resources. Summarize the estimated life cycle cost and program cost. Identify OMA and OPA requirements, availability of funds, and source of funding. Also, identify any additional resources necessary (i.e., manpower, equipment, facilities, government-furnished equipment, etc.) to complete this project.

9. Program management structure to include resourcing, development and testing responsibilities, and reporting channels.

10. Test strategy.

11. Constraints. Identify all problems or circumstances that will have an adverse critical impact on the acquisition.

12. Conclusion. Solicit results from IMSC—system approval, waiver to payback, etc.

Figure 3-1. IMSC briefing outline

d. DCSIM will—

- Notify submitting organization of the disposition of the package.
- Prepare the results of electronic staffing, minutes of the meetings, and develop staff actions needed to carry out decisions of the council, unless those staff actions are assigned to another agency.
- Provide the final decision, in writing, to the organization that submitted the request.
- Obtain a system identification code and automated information system code, if required, and inform the submitting organization.

e. Services for hardware maintenance and routine software maintenance do not require HQ TRADOC approval. They are considered requirements for sustaining previously approved IT. However, acquisition of these services must be authenticated by the installation DOIM using locally-developed procedures.

3-2. Funding categories. Submitting organizations, in coordination with the DOIM and resource managers, will identify the type(s) of funds to be used for acquisition of IT or information services. This is a complicated issue, with many variables controlled by DoD guidance. A summary of guidance contained in Defense Finance and Accounting Service-Indianapolis Center (DFAS-IN) Manual 37-100-XX follows.

a. The determination of the appropriate type of money for acquisitions is based on the concept of a "system" as the solution to a documented requirement. According to DFAS-IN 37-100, "A system exists if a number of components are designed primarily to function within the context of a whole and will be interconnected to satisfy an approved Army requirement." Since this definition is subject to variation in its interpretation, the following paragraphs are intended to clarify the definition of a system and provide guidance on application of the definition to common IT components. The policies and interpretations set forth are as definitive and exhaustive as circumstance permit, but individual cases may still require specific interpretation.

(1) Common user infrastructure components provide connectivity between end user components, both internal and external to the installation. (Note: For purposes of these determinations, a device is considered to be any hub, router, switch, or edge device that supports network connectivity.)

(a) Campus area network (CAN) components. If a component provides inter-building connectivity, it is considered part of the CAN system. This would include, but is not limited to, the device in the main communications closet of a building that provides the connection to the CAN. There is generally only one CAN per installation. The sum of all CAN system costs is used to make the OMA/OPA determination. If an action is taken to upgrade an existing device, it is considered a modification and the total cost of the modification is considered when making the OMA/OPA determination. (Installation of Fiber Optic Cable—that replaces the need for copper wiring—has been determined to be an OMA requirement.) If it is a new device, the entire cost contributes to the total cost (of the acquisition) when making the OMA/OPA determination.

(b) Building LAN (BLAN)/LAN components. If a component does not meet the criteria for a CAN, and provides only user connectivity (not including the device higher in the architecture to which it is connected), it is considered part of a LAN system. If it provides connectivity to another device lower in the architecture (regardless of whether there are any users connected), it is considered part of the BLAN (building infrastructure) system. If it upgrades an existing device, it is considered a modification and the total cost of the modification is considered when making the OMA/OPA determination. If it is a new device, the entire cost contributes to the total cost of the acquisition when making the OMA/OPA determination. Total BLAN costs for an individual building are used to make the OMA/OPA determination. Costs for each LAN are considered separately when making the OMA/OPA determination.

(c) Installation, Operation, Administration and Maintenance workstations and accompanying software are considered to be independent systems. Costs for each independent system are considered separately when making the OMA/OPA determination.

(d) IS security systems (intrusion detection system, firewalls, etc.) are considered to be independent systems. Costs for each independent system are considered separately when making the OMA/OPA determination.

(2) End-user components.

(a) Workstations. Workstations—whether PC or more advanced computers, including peripheral devices and resident software—should be considered to be independent systems regardless of their source or associated application(s). Costs for each independent system are considered separately when making the OMA/OPA determination.

(b) Servers. Servers, including peripheral devices and resident software, should be considered to be independent systems regardless of their source or associated application(s). Costs for each independent system are considered separately when making the OMA/OPA determination.

(c) Other equipment. Other equipment such as network printers, multi-function devices or modem banks, should be considered independent systems if they are capable of independent operation or provide support to more than one other end-user component. Costs for each independent system are considered separately when making the OMA/OPA determination.

(3) System upgrades made within any 12-month period prior to an acquisition must be included as part of total system costs for determining the threshold. If costs in the previous 12 month period, plus the proposed upgrades, total more than $100K, OPA dollars are required.

3-3. Resource availability. Approved requirements must be matched to resources in order to be executed. An approved ORD constitutes nothing more than permission to execute an approved solution if resources are available. An approved ORD does not in itself provide the resources to implement the solution. Determine, in coordination with resource managers, how the approved requirement will be funded.

a. Resourcing may come from a variety of sources including the user organization, DOIM, installation automation accounts, or external organizations. If the resources are available and necessary approvals have been granted, proceed to implement the solution using the procedures given in chapter 4.

b. Some requirements, prior to or subsequent to approval, will remain unresourced. Such a requirement, generally called a UFR, must compete for resources. Both funding approval (through the funding source) and acquisition approval (through the procedures described in this pamphlet) are required to execute an IT project. See paragraph 2-3b(4) regarding a conditional exemption for networks and E-mail systems.

c. The documentation format for a UFR can vary according to the particular resource management process being used. Follow the procedures for documentation and coordination established for the specific process, but for UFR involving IT or information services, as a minimum, cover the topics in figure 3-2 somewhere in the description.

d. Installations will maintain a prioritized list of UFR for IT per TR 25-73. Maintain the list in such a way that it will be a tool for quick reaction decisions on where resources can be opportunistically applied. The list should support decisions about the utility of partial funding and the required synchronization links among separately packaged requirements. Ensure links between functional requirements and associated infrastructure requirements are kept apparent. Distinguish between OPA and OMA costs if applicable. The ISAP is such a tool for network requirements.

a. Descriptive title.

b. The specific organization and function the project supports. Relate this to the command or installation operational architecture if appropriate.

c. Narrative description of the project and the specific additional capability it will provide. Relate this to the command or installation system architecture.

d. Description of the consequences of not funding or partial funding of the project, e.g., Directorate of Logistics will have 37 non-Defense Messaging System capable machines.

e. Other projects, if any, on which this one depends for successful implementation.

f. Other projects, if any, that depend on the start or completion of this project.

g. Expected time to complete.

h. Estimated total cost.

i. Point of contact, telephone number, E-mail address for technical details.

j. In addition, projects which are being submitted for execution within the next fiscal year should also include:

(1) Detailed cost itemization of all items or groups of like items costing more than $3,000. Include quantity and unit costs. Additional items should be listed under categories such as miscellaneous hardware, miscellaneous software, etc., to account for total cost.

(2) Whether or not incremental funding is acceptable and, if so, in what increments. Address executability of separate OPA and OMA increments.

k. Lead-time required to execute.

l. If available, ORD approval date for solutions over $200K.

Figure 3-2. Mandatory UFR information

Chapter 4
Acquisition

4-1. DOIM authentication.

a. In accordance with TRADOC Reg 25-73, all acquisition packages for IT and information services will include a DOIM authentication. The primary purpose of the authentication is to ensure the solution specified for acquisition can be supported by the local IT architecture and support services. When the DOIM is the organization originating the acquisition (e.g., for common user networks) a separate authentication document is unnecessary, but the DOIM will still ensure the package is supportable and complies with architectural constraints. DOIM can authenticate acquisition packages for local systems, regardless of cost, if the requirement has previously been approved IAW chapter 3. HQ TRADOC DCSIM will authenticate procurement packages affecting multiple installations, installations other than requesting activity's, or TRADOC activities outside DOIM support. Regardless of the documentation format used, DOIM authentication validates the points shown in figure 4-1.

b. DOIM will maintain an electronic listing of authenticated acquisition packages, including at least the title, dollar amount, date approved, and a description of items or services purchased.

c. A change in the acquisition package after authentication, or modifications to contracts/orders already awarded, necessitates an amended authentication.

d. For acquisitions that can be authenticated at installation level, TRADOC Form 25-73-1-R, Information Technology Requirement (ITR) Work Order, is available for optional use.

4-2. Acquisition documentation formats. Requester should contact DOIM to determine local documentation requirements for obtaining DOIM authentication. Some formats are established in guidance that is not IT-unique but does apply to IT acquisitions, e.g., TRADOC Pam 715-6 (found on-line at http://www.tradoc.army.mil/tpubs/pams/p715-6.htm). Guidance follows for preparing a SOW and Purchase Request and Commitment for IT acquisitions. Customer should work closely with the contracting office to develop required documentation.

a. SOW. The format for a SOW is shown in figure 4-2.

b. Purchase Request and Commitment (DA Form 3953).

(1) IS, IS equipment or information services may be requisitioned using a DA Form 3953. Do not use DA Form 3161 to request IS equipment.

(2) An original certifying official signature must be on the form itself or in an accompanying letter specifying applicable requisition number and dollar figures for each. The requisition must be processed through the supply support activity (SSA). Requirements for services such as installation or maintenance must be requested using a separate DA Form 3953 and will not be processed by the SSA.

(3) If different vendors/contracts are expected to provide components of the procurement request, submit a separate DA Form 3953 for each separate vendor or separate contract. If the procurement request is for generic items that could be provided by more than one vendor, combine on one DA Form 3953.

(4) If ordering a complete system, so state, giving a full description of each separate orderable item.

(5) The following blocks are those where mistakes most frequently occur:

(a) 'Requisition Number' must be in the standard unit identification code/Julian date/serial number format (i.e., W26R1P 8123-0001). The first part is an alphanumeric designator that identifies the requiring activity; the second part is the Julian date; the third part is a sequential serial number. If this type numbering system is not used for each line item on the requisition, the document number cannot be entered into the computer system and will be returned by the contracting activity for correction.

(b) 'Delivered To' must contain full 'Ship To' and 'Mark For' instructions, addresses, point of contact (POC) and commercial phone number, required predelivery notice, and any time/day delivery requirements or restrictions.

1. DOIM (or designee) has reviewed the acquisition package and is satisfied the solution is technically consistent with the requirement and the supporting data is technically accurate and complete.

2. Requirement has been approved IAW TRADOC Reg 25-73 and this pamphlet.

3. Type of funds being used (e.g., OMA, OPA) is IAW TRADOC Reg 25-73 and this pamphlet.

4. Validation is given that (insert a statement that applies)

- Acquisition complies with the standards prescribed by the Joint Technical Architecture - Army (JTA-A).

- Acquisition is from a Department of the Army (DA)/DoD standard requirements contract that has been certified JTA-A compliant.

- Acquisition is exempt from JTA-A compliance because it is a totally stand-alone asset.

5. The acquisition meets command and installation level technical and system architecture constraints. (If not, explain)

6. Solution has been coordinated with the Installation Information Systems Security Manager.

Figure 4-1. Sample DOIM authentication format

(c) 'Not Later Than' should reflect a calendar date or a number of days after contract award that supply/service is required. If the required time is sooner than can be achieved with a normal acquisition lead-time, include a justification for urgency and an impact statement if the required delivery date is not met.

(d) Ensure 'Name and Telephone Number of Person to Call for Additional Information' reflects the DOIM (or his designee) as the single POC and includes Defense Switched Network and commercial prefixes. The contracting office will not provide status information to anyone unless they are listed as the POC.

(e) 'Local Purchase Authority' should be ARs 25-1, 70-1, and/or 71-9.

(f) Appropriate 'Accounting Classification' and 'Amount' must be certified by the funds certifying official (include telephone number). Unless otherwise noted, it will be assumed:

- '2020' funds expire 30 September of the current fiscal year (FY).
- '2035' funds expire 30 September of third FY.
- '2040' funds expire 30 September of second FY.
- '2080' funds expire 30 September of the current FY.
- '97X49030' expires 30 September of the current FY.

(g) Distribution of the final contract document will include: (DOIM is recommended addressee)

- Requester (provide full mailing address).
- DOIM.
- 'Ship To' address(ees).
- Finance office (provide full mailing address).
- COR (if applicable) (provide full mailing address).
- Fund certifying/approving official.
- Others (you must list and provide full mailing address).

4-3. General guidance. Contacts with vendors.

a. The Army has delegated contracting authority to warranted KO or their designees. The specific authority and limitations of the designee are contained in their appointment letter. Persons who have not been designated as KO (or their designees) are not permitted to:

(1) Contact vendors or bidders to negotiate prices or delivery of an item.

(2) Solicit price quotes or technical proposals for any purpose, including 'planning' purposes or to develop an independent government estimate.

(3) Provide contracting information or government price estimates to contractors.

(4) Tell contractors or bidders about their competitors' bids or proposals. (Note: Not even the KO can divulge such information.)

(5) Permit or instruct a contractor to change the technical provisions of a contract.

STATEMENT OF WORK

a. Objective. Specify the services or products desired.

b. Background. Describe the problem. Indicate how the effort relates to the following:

(1) The mission of the agency/command.

(2) Prior or ongoing in-house or contract efforts.

c. Tasks. This is the primary element of the SOW. Describe in detail what is to be accomplished. The emphasis should be on what is to be done, not how it is to be done. SOW should contain enough detail to ensure that the contractor can develop a plan to meet the objectives and standards of performance of the effort. It should also include objectives that the Army can use to measure contractor performance. It should not contain such detail as to inhibit the contractor from full use of capabilities and resources.

d. Deliverables. List the products to be produced. For each, indicate quantity, place of delivery, and schedule of delivery. All dates in the SOW should be stated relative to the date of contract award. If development and delivery of data items is required, this information is to be provided on DD Form 1423 (Contract Data Requirements List), with supporting DD Form 1664 (Data Item Description). DD Form 1423 must be attached to SOW. (DD 1423 not required if data is "non-commercial" or otherwise already exists.)

e. Control procedures. Describe the means that will be used to maintain quality control.

(1) Reviews. Indicate if progress review meetings will be necessary (normally only if a cost reimbursable development effort).

(2) Reporting. Specify whether the contractor must submit written progress reports to the Contracting Officer (KO)—and the contracting officer's representative (COR), if used—and the frequency of the reports (e.g., monthly, bi-monthly, quarterly). Specify the desired contents of the reports, such as technical progress and fund expenditure (normally only for a development effort).

f. Government-furnished support. Specify facilities (and locations), equipment, furniture, phone (normally only local calls), administrative support, data, documents, computer software and hardware, and other materials that will be made available for contractor use. Be sure to indicate the time schedule for providing this support.

Figure 4-2. Statement of Work

(6) Modify or alter the scope of effort prescribed in an existing contract.

(7) Make statements regarding a contract, bid, project, or proposal that may be construed as a commitment by the government.

(8) Sign letters of intent to purchase.

(9) Sign license agreements.

(10) Request, or accept from a contractor, a loaned piece of equipment, software, free sample, or free demonstration (on-site or at contractor site) for any reason. All such situations must be referred to the KO. Where it is desirable to accept a loan or demonstration, the following guidelines apply:

- A demonstration may be conducted after the KO executes the proper agreement with the vendor.
- The proper way to test contractor-owned products is to contact the KO. The KO can submit an advertisement to the Commerce Business Daily describing the particular capability and other appropriate information. This will remove the appearance of any favoritism to any particular vendor. Be prepared to allow equal time to all vendors who wish to demonstrate their products.
- General guidelines:
  - ° You may listen to anything the contractor has to say regarding their capabilities.
  - ° You are never authorized to contact a vendor regarding any particular requirement you may have.
  - ° You must be extremely careful when requesting 'general' information not to give vendors any advance procurement information.
  - ° You may never request that a vendor demonstrate a particular product or capability without first contacting the KO to request that a vendor demonstration agreement be executed with the vendor.
  - ° Be prepared for direct contact from vendors. You may provide information about such things as the future direction of your organization/goals (i.e., upgrade of communications system planned for 2001) but not information on specific procurements.

b. The Federal Acquisition Regulation (FAR) system prescribes procedures applicable in each of the above situations. The KO may specifically delegate some of the above responsibilities to his representative. Circumvention of established procedures to expedite an action may give a particular vendor an advantage over others and is expressly prohibited. Accordingly, all individuals must scrupulously avoid any of the aforementioned unauthorized acts. In accordance with DOD 5500.7-R, anyone involved with source selection for a procurement action will be required to complete an Office of Government Ethics (OGE) Form 450, Confidential Financial Disclosure Report, provided and maintained by the servicing ethics counselor. Commanders are responsible for disseminating and ensuring compliance with the foregoing guidance throughout their commands.

Chapter 5
Visual Information (VI)

5-1. Procedures to acquire VI.

a. VI equipment and systems exceeding the OPA threshold (currently $100,000) are considered investment items and are DA controlled. Requirements for such equipment will be validated by the requesting installation VI manager, and forwarded through the TRADOC VI Management Office to the Office of Director of Information Systems for Command, Control, Communications, and Computers for approval, prioritization, and funding (Management Decision Package MU1M). The Television-Audio Support Activity (T-ASA), an Office of the Secretary of Defense organization, is the item commodity manager for the acquisition of commercially available VI investment equipment and systems. The policies and procedures for identifying and submitting VI investment equipment requirements can be found in AR 25-1 and DA Pam 25-91.

b. Expense VI equipment and systems costing more than $50,000 must be procured by T-ASA, unless local procurement authority is granted. Expense VI equipment and systems costing less than $50,000 may be procured locally upon approval/validation of the installation VI manager.

c. Installation commanders may designate specific non-production VI expense equipment for procurement, ownership, and operation by organizations normally supported by an authorized TRADOC VI Activity. The following guidelines will be observed when exercising this policy:

(1) Only expense funded VI equipment with a per item/system cost under $25,000 may be considered.

(2) End-user ownership should be limited to situations where such ownership will benefit mission performance of the user and/or VI activity.

(3) The installation VI manager will validate the procurement request for this type of equipment to ensure conformance with interoperability standards, VI architecture, and IT strategy.

(4) Logistical and training support to end-users will continue to be provided by the VI activity where applicable. Scheduled and unscheduled maintenance will be the responsibility of the owner.

(5) Common support VI activities will continue to provide a limited amount of VI equipment of this type for short-term loan as necessary.

(6) Motion and still media production equipment will not be included in this policy. Examples include, but are not limited to, industrial or professional grade videotape recorders/camcorders, videotape editing equipment, digital continuous tone printers, or film recorders.

(7) The following equipment is specifically designated as qualifying for end-user ownership:

- Overhead projectors
- 35mm slide projectors
- Self-developing and point and shoot-type cameras
- Consumer grade VHS videotape and digital video disk players and recorders

- Consumer grade digital and video still cameras (less than $3,500)
- Consumer grade VHS camcorders (local documentation use only)
- Projection screens
- Liquid Crystal Display projection panels
- Video/data projectors
- Television receivers/monitors
- Audio compact disc players
- Portable, self-contained public address systems (including podiums)

5-2. Coordination.

a. Requirements for VI that include networking or computer processing capabilities will be coordinated with the installation DOIM prior to acquisition or forwarding to MACOM/HQDA for approval.

b. VI managers will participate in the IMSC process. Requirements for major VI acquisitions should be reviewed at the installation level by the local IMSC.

Chapter 6
Contract Offloads and Purchase Card Transactions

6-1. Interagency orders and intra-DoD contract offloads.

a. An offload occurs when an interagency order uses contracting support from non-DoD agencies. An intra-DoD contract offload uses contracting support outside TRADOC but within DoD. The decision and responsibility for obtaining IT and services from other than the assigned responsible contracting office rests with the commander, director, or chief of the requiring activity, in coordination with the assigned responsible contracting office.

b. The TRADOC POC for interagency orders and intra-DoD contract offloads is HQ TRADOC, DCSBOS, Acquisition Directorate (ATBO-A). DCSBOS can provide procedures and suggested documentation requirements used to authorize offloads.

c. The DOIM will review all offloads for IT and information services below the cost threshold delegated by HQ TRADOC DCSBOS to local activities and installation commanders. HQ TRADOC DCSIM will review offloads that require HQ TRADOC approval, IAW the cost threshold defined by HQ TRADOC DCSBOS.

6-2. Government purchase card transactions.

Authority for cardholders outside the Directorate of Contracting (DOC) to purchase IS components and repair parts lies jointly with the local DOC and DOIM. License software that requires negotiation for a contract (i.e., software not non-commercial) will not be purchased with the government purchase card used by cardholders outside the DOC. The government purchase card will not be used for information services exceeding $2,500 or service/maintenance on equipment under contracts awarded by the DOC.

a. The DOIM and DOC will institute controls to assure that all required approvals are obtained prior to the placement of an order. DOIM authentication is still required IAW paragraph 4-1. Installation commanders are authorized to develop local guidance on items, or categories of items, that are exempt from case-by-case DOIM authentication, provided architectural control and acquisition oversight can be maintained.

b. Use of the government purchase card is limited to $2,500 or less, unless the cardholder has received additional training and is specifically granted written authority to have a higher purchase limit. Requirements shall not be fragmented to avoid this threshold. The government purchase card shall not be used to circumvent the supply system. The card shall not be used for information services that exceed $2,500 or service/maintenance on equipment under contracts awarded by the DOC.

c. When purchasing IT, use of the government purchase card is limited to acquisitions that require OMA funds only.

Appendix A
References

Section I
Required Publications

FAR
Federal Acquisition Regulation (cited in para 4-3b)

DOD 5500.7-R
Joint Ethics Regulation (cited in para 4-3b)

Army Enterprise Architecture Guidance Document (cited in paras 2-2a(1), 2-2a(2), and 2-2b(1))
http://arch-odisc4.army.mil/aes/html/aeagd.htm

JTA-A
Joint Technical Architecture–Army (cited in paras 2-2a(3), 2-2b(3), -1b, and figure 4-1)(http://arch-odisc4.army.mil/aes/aea/jta-a/html/homepage.htm)

AR 25-1
Army Information Management (cited in paras 2-2a(1), 2-3b(4), 4-2b(5)(e), and 5-1a)

AR 70-1
Army Acquisition Policy (cited in para 4-2b(5)(e))

AR 71-9
Materiel Requirements (cited in para 4-2b(5)(e))

DA Pam 25-91
Visual Information Procedures (cited in para 5-1a)

TRADOC Reg 25-73
Information Systems for TRADOC Organizations and Installations (cited in para 3-1a, 3-3d, 4-1a, and figure 4-1)

TRADOC Pam 25-73
TRADOC Plan for Reengineering Information Modernization (TPRISM) (cited in paras 2-2a(2), 2-2a(3), 2-2b(2), and 3-1c(3), and figures 2-1 and 3-1)

TRADOC Pam 71-9
Requirements Determination (cited in paras 2-3b(3) and 3-1a)

TRADOC Pam 715-6
Independent Government Estimate Preparation Guide (cited in para 4-2)

Section II
Related Publications

Section 2304(c), Title 10, United States Code

Section 1302(a), Title 31, United States Code

DFARS
Defense Federal Acquisition Regulation Supplement

DFAS-IN Reg 37-1
Finance and Accounting Policy Implementation

Army Federal Acquisition Regulation (AFARS)

AR 11-18
The Cost and Economic Analysis Program

JTA
Joint Technical Architecture

TRADOC Reg 70-1
TRADOC Advance Acquisition Planning System (TAAPS)

Section III
Referenced Forms

DD Form 1423
Contract Data Requirements List

DD Form 1664
Data Item Description

DA Form 3161
Request for Issue or Turn-In Report

DA Form 3953
Purchase Request and Commitment

Office of Government Ethics (OGE) Form 450
Executive Branch Confidential Financial Disclosure Report

TRADOC Form 25-73-1-R
Information Technology Requirement (ITR)

Glossary

Section I
Abbreviations

AEAGD	Army Enterprise Architecture Guidance Document
BLAN	building local area network
BPR	business process reengineering
CAN	campus area network
COR	contracting officer's representative
DFAS-IN	Defense Finance and Accounting Service-Indianapolis Center
DOC	Director(ate) of Contracting
DOIM	Director(ate) of Information Management
EA	economic analysis
FAR	Federal Acquisition Regulation
FY	fiscal year
IAW	in accordance with
IMSC	Information Management Support Council
IS	information system
ISAP	installation system architecture plan
IT	information technology
JTA	joint technical architecture
KO	contracting officer
LAN	local area network
MACOM	major Army command
OA	operational architecture
OMA	Operation Maintenance, Army
OPA	Other Procurement, Army
ORD	Operational Requirement Document
POC	point of contact
SA	systems architecture
SOW	Statement of Work
SSA	supply support activity
TA	technical architecture

Section II
Terms

automated information system
A combination of computer hardware and software, data, or telecommunications, that performs functions such as collecting, processing, transmitting, and displaying information. Excluded are computer resources, both hardware and software, that are physically part of, dedicated to, or essential in real-time to the mission performance of weapon systems.

electronic subscription
A subscription for a periodical or reference material that is accessed by a personal computer, provided on CD ROM or via the Internet for an agreed number of issues or number of months, and is incapable of being changed by the subscriber.

Information Management Support Council (IMSC)
An installation implementation work group organized under the direction of the DOIM. The group is comprised of host installation and tenant representatives used to plan and execute the management of the installation information resources.

information services
Those Government-owned or leased services provided by all types of IS and facilities. Included are hardware and software automation support, visual information support, telecommunications support, integrated information support, and printing and publication support activities. Electronic subscriptions are not included as services.

information system
Organized assembly of resources and procedures designed to provide information needed to execute or accomplish a specific task or function. IS equipment consists of components (e.g., hardware, software, firmware, products, or other items) used to create, record, produce, store, retrieve, process, transmit, disseminate, present, or display data or information. (See also Information technology)

information system component
Hardware, software, firmware, products, procedures or other items used in the assembly of IS.

information system equipment
Equipment that is a configuration of one or more IS components used for the creation, recording, production, storage, retrieval, processing, transmission, dissemination, presentation or display of data or information. IS equipment is used to perform functions associated with automation telecommunications, visual information, printing, publishing, and records management in support of the Army's mission.

information system requirement
Specific functions which an IS must perform (functional requirement); specific components which an IS must contain (system requirement); or specific technical principles or standards an IS must adhere to (technical requirement).

information technology

a. Any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For purposes of the preceding sentence, equipment is used by an activity if the activity itself uses it, or a contractor under contract with the activity requires the use of such equipment in the performance of a service, or the furnishing of a product.

b. The term information technology includes computers, ancillary equipment, software, firmware, and similar procedures, services (including support services), and related resources.

c. Notwithstanding subparagraphs a and b, the term information technology does not include any equipment that is acquired by a Federal contractor incidental to a Federal contract.

operational architecture
OA is a description, often graphical, which defines the force elements and the requirement to exchange information between these force elements. It defines the types of information, the frequency of its exchange, and what warfighting tasks are supported by these information exchanges. It specifies what the IT is operationally required to do and where these operations are to be performed. TRADOC, for the Army, is producing the first version of the OA, focusing on division level functions.

subscriber
Any person, group, organization (including concessionaire), or appropriated or nonappropriated fund activity that procures services made available pursuant to the terms of the franchise agreement.

subscription
A periodical acquired for a specific sum paid, usually for a specified and agreed number of issues or months.

support services
Contracting services acquired to provide hardware or software support for IS such as personal computers, LANs, etc. Support services does not include electronic subscriptions.

systems architecture
SA is the physical layout, depicted graphically, showing the relationship of the information exchange and connectivity requirements. The SA identifies components, capabilities, and establishes interconnections among command, control, communications and computer components of systems. It also specifies the system performance parameters. The SA is constructed to satisfy operational architecture requirements per the standards defined in the technical architecture. The SA can be developed for an individual system or at higher levels to depict the integration of numerous systems into a "system of systems" architecture.

technical architecture
TA is the minimal set of rules governing the arrangement, interaction, and interdependence of the parts or elements that together may be used to form an IS. It is comparable to a building code, not telling you what to build (OA), or how to build (SA), but rather delineating the standards to build to and pass inspection. The TA identifies a framework of standards and includes top-level system specifications and architectural diagrams for technical interface specifications. The DoD has issued the Joint Technical Architecture and the Army has issued the Joint Technical Architecture-Army.

Technical Architecture Framework for Information Management
Identifies information technology standards that promote interoperability, portability, and scalability.

total program costs
All expenditures for research, development and procurement necessary to field a solution for a stated requirement.

FOR THE COMMANDER:

OFFICIAL:

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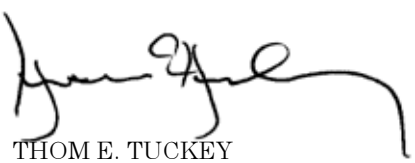
Chief of Staff



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